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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,917	08/01/2005	Ayton J Grady	5101-000002/US	5055
30593	7590	04/16/2009	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			MAUST, TIMOTHY LEWIS	
		ART UNIT	PAPER NUMBER	
		3751		
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		04/16/2009		PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/519,917	GRADY, AYTON J	
	<b>Examiner</b>	<b>Art Unit</b>	
	Timothy L. Maust	3751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 01 August 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-30 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-30 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 03 January 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/3/05</u> .  | 6) <input type="checkbox"/> Other: _____ .                        |

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 10-16 and 23-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Courtney et al. (5058776)

Regarding claims 1, 11, 23 and 25, the Courtney et al. reference discloses a particulate dispensing apparatus (see Figure 1) for dispensing particulate refractory material (122) into a lining gap (120) defined between an inner furnace surface (20) and an expendable metal form (16), said particulate dispensing apparatus comprising: a platform (32) supporting a carriage (49) adjacent an upper end of said expendable metal form, said carriage being pivotally coupled to said platform and rotatable about a pivot point (48) located generally at the center of said platform; a hopper (110) coupled to said carriage, said hopper for receiving particulate refractory material via an inlet (rim 108) and dispensing said particulate refractory material through an outlet (112); a feeder (auger 116) coupled to the outlet of said hopper, said feeder for moving the particulate refractory material from said outlet to a dispenser (118), said dispenser being coupled to said carriage at a distal end of said feeder and being suspended above said lining gap to deliver particulate refractory material into said lining gap; an air extractor device (174) coupled to said carriage for removing air from particulate

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refractory material deposited in said lining gap and for re- compacting the particulate refractory material; and driving means (actuator motor 150 and wheel 72) for rotating said carriage relative to said platform.

Regarding claims 2, 3, 13, 14 and 27, wherein said feeder comprises a trough (114) coupled to the outlet of said hopper for receiving said particulate refractory material and an auger (166) with a continuous blade coupled to said carriage and extending through said trough, said auger rotating about an auger axis to move particulate refractory material from the outlet of said hopper to said dispenser.

Regarding claim 4, see forks (tines) on head (176).

Regarding claims 10 and 15, inasmuch structure that is defined by an accumulator, the funnel (unlabeled) positioned between the auger outlet and dispenser (118) meets the claim limitation.

Regarding claims 12 and 26, see the walls of hopper (110) in Figure 1.

Regarding claim 16, inasmuch structure that is defined by a viewing window, the opening above dispenser (118), as seen in Figure 2, meets the claim, since one could view from above the material being dispensed at that point.

Regarding claim 24, dispenser (118) extends into the gap (120) as seen in Figure 1.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courtney et al. in view of Reeves (5697408).

Regarding claims 5-9, the Courtney et al. reference discloses the invention substantially as claimed (discussed supra), but doesn't disclose the dispenser (118) being comprised of a telescopic shaft having a level sensor. However, the Reeves reference discloses another particulate material loader having a telescopic dispenser (10) with a level sensor (probe 28) to control the filling level of the particulate material. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Courtney et al. device with a telescopic dispenser and level sensors as, for example, taught by Reeves to further control the filling level of the particulate material.

Claims 17, 20-22 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courtney et al.

Regarding claims 17 and 28, the Courtney et al. reference discloses the invention substantially as claimed (discussed supra), but doesn't disclose the auger blade being variably pitched. It would have been an obvious matter of design choice to

make the auger blade variably pitched, since applicant has not disclosed that a variably pitched blade rather than a uniformly pitch blade solves any stated problem and it appears that the invention would perform equally well with either blade.

Regarding claim 20 and 21, see the walls of hopper (110) in Figure 1.

Regarding claims 22 and 29, inasmuch structure that is defined by an accumulator, the funnel (unlabeled) positioned between the auger outlet and dispenser (118) meets the claim limitation.

Regarding claim 30, see air extractor device (174) in Figure 1.

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courtney et al. as applied to claim 17 above, and further in view of Reeves.

Regarding claims 18 and 19, the Courtney et al. reference discloses the invention substantially as claimed (discussed supra), but doesn't disclose the dispenser (118) being comprised of a telescopic shaft having a level sensor. However, the Reeves reference discloses another particulate material loader having a telescopic dispenser (10) with a level sensor (probe 28) to control the filling level of the particulate material. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Courtney et al. device with a telescopic dispenser and level sensors as, for example, taught by Reeves to further control the filling level of the particulate material.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art of record pertains to various particulate dispensers, similar to Applicant's device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L. Maust whose telephone number is (571) 272-4891. The examiner can normally be reached on Mon. - Thur. 7:00-5:30pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy L Maust/  
Primary Examiner  
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